**Remarks**

**I. Examiner Interview**

Applicant's attorneys appreciate the Examiner's courtesy in speaking with them on January 28, 2008, regarding the outstanding office action. The interview included discussion of the rejections made by the Examiner, the Oikawa reference (Japan Patent No. 05167850A), and the Yamagishi reference (U.S. Patent Application Publication No. 2003/0231350). No agreement was reached and Applicant submits that the comments below reflect the substance of the interview.

**II. Status**

Claims 1, 11, 18, and 28 have been amended. The amendments are supported by the specification. No new matter has been added as a result of the amendments. Claims 1-37 are currently pending.

**III. Rejections under 35 U.S.C. § 103**

Claims 1-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Oikawa (Japan Patent No. 05167850A), and in view of Yamagishi (U.S. Patent Application Publication No. 2003/0231350) ("Oikawa-Yamagishi combination"). Amended independent Claims 1 and 11 recite identifying a grid of pixels having a predetermined pattern of pixel values, where the predetermined pattern of pixel values has an undesirable toner placement. Similarly, amended independent Claims 18 and 28 recite that the predetermined patterns have an undesirable toner placement and determining whether a set of received pixel data matches one of the predetermined patterns. Applicant respectfully submits that the Oikawa-Yamagishi combination does not at least teach this feature. The Office Action asserts that Oikawa discloses identifying a grid of pixels having a predetermined pattern of pixel values, but admits that Oikawa does not teach or suggest that the predetermined pattern has an undesirable toner placement. (Office Action, page 2). The Office Action relies on Yamagishi to disclose that predetermined patterns have an undesirable toner placement. (Office Action, page 3).

The Oikawa-Yamagishi combination, even if made, does not teach identifying a grid of pixels having a predetermined pattern of pixel values, where a predetermined pattern of pixel values has an undesirable toner placement, or that predetermined patterns have undesirable toner placements and determining whether a set of received pixel data matches

one of the predetermined patterns, as described in Claims 1, 11, 18, and 28. The test patterns disclosed in Yamagishi do not have an undesirable toner placement because they merely consist of gradually varied halftone images "different from each other" that do not specifically have an undesirable toner placement. (Yamagishi, ¶¶ 11, 56, Fig. 18). The test patterns are not identified but instead are formed as toner images on the image carrying mechanism 13. (Yamagishi, ¶¶ 9, 57-61, Fig. 18). An image density detector 21 then measures the physical density distribution of the toner images on the image carrying mechanism 13. (Yamagishi, ¶¶ 9, 57-61, Fig. 18). Image noise in the toner images, if any, is detected in Yamagishi based on the physical density distribution data. (Yamagishi, ¶¶ 9, 59-61). Therefore, the Oikawa-Yamagishi combination does not teach or suggest identifying the predetermined pattern of pixel values having an undesirable toner placement, as recited in Claims 1, 11, 18, and 28. Instead, the Oikawa-Yamagishi combination only discloses identifying image noise in the toner images after the toner images are formed on the image carrying mechanism. Detecting image noise in the toner images is not identifying a predetermined pattern of pixel values having an undesirable toner placement. The Oikawa-Yamagishi combination does not disclose identifying the test patterns themselves, and does not disclose that the test patterns specifically have an undesirable toner placement. Claims 1, 11, 18, and 28 are therefore patentable for at least the above reasons.

Amended independent Claims 1 and 11 also recite that if the grid of pixels having the predetermined pattern is identified, a predetermined pcode grid is obtained, where the predetermined pcode grid corresponds to the identified grid of pixels. Similarly, amended independent Claims 18 and 28 recite directing the output of an image in accordance with grid data corresponding to one of the predetermined patterns, in place of the set of received pixel data, if the set of received pixel data matches one of the predetermined patterns. The Office Action asserts that Oikawa teaches these features, but Applicant respectfully submits that the Oikawa-Yamagishi combination does not teach these features. Oikawa applies a cruciform memory pattern to a graphic pattern, and then compares the memory pattern conforming to part of the graphic pattern to the memory pattern after it is moved one pixel over on part of the graphic pattern. (Oikawa, abstract; ¶¶ 0010, 0016, and 0017; Figures 2, 3, and 4). Oikawa then detects a curve part and an oblique part of a character and deforms a picture element of the graphic pattern to smooth these parts when the graphic pattern is printed.

(Oikawa, abstract; ¶¶ 0026-0029). Oikawa smoothes the curve and oblique parts of a character by identifying the change in the cruciform memory pattern from when it is first applied to when it is moved one pixel over. (Oikawa, ¶¶ 0021-0025; Figure 4, 5, and 6).

The Oikawa-Yamagishi combination, even if made, does not teach or suggest that if the grid of pixels having the predetermined pattern is identified, a predetermined pcode grid is obtained, where the predetermined pcode grid corresponds to the identified grid of pixels, as recited in Claims 1 and 11. The Oikawa-Yamagishi combination also does not teach or suggest directing the output of an image in accordance with grid data corresponding to one of the predetermined patterns, in place of the set of received pixel data, if the set of received pixel data matches one of the predetermined patterns, as recited in Claims 18 and 28. Instead, Oikawa merely smoothes the "jaggy" of a curved part and an oblique part of a character. (Oikawa, ¶¶ 0028-0029). Oikawa does not disclose obtaining a predetermined pcode grid corresponding to the identified grid of pixels in response to identifying that the grid of pixels has the predetermined pattern, as described in Claims 1 and 11. Oikawa also does not disclose directing the output of an image in accordance with grid data corresponding to one of the predetermined patterns, in place of the set of received pixel data, in response to matching the set of received pixel data with one of the predetermined patterns, as described in Claims 18 and 28. Claims 1, 11, 18, and 28 are therefore also patentable for at least these reasons.

Amended independent Claim 1 further recites that the first processor is adapted to send the predetermined pcode grid to a controller circuit for printing in place of the grid of pixels. Similarly, amended independent Claim 11 recites printing the predetermined pcode grid in place of the grid of pixels. Amended independent Claims 18 and 28 recite directing the output of an image in accordance with grid data corresponding to one of the predetermined patterns, in place of the set of received pixel data. The Oikawa-Yamagishi combination does not teach this feature. Instead, Oikawa smoothes the curve and oblique parts of a character by identifying the change in the cruciform pattern from when it is first applied to when it is moved one pixel over, and smoothes the "jaggy" of a character. (Oikawa, ¶¶ 0021-0025, 0028-0029; Figure 4, 5, and 6). The Oikawa-Yamagishi combination, even if made, does not teach or suggest sending or printing a predetermined pcode grid in place of a grid of pixels, as recited in Claims 1 and 11, or directing the output of an image in accordance with grid data corresponding to one of the predetermined patterns, in

place of the set of received pixel data, as recited in Claims 18 and 28. Instead, Oikawa merely smoothes the "jaggy" of a curved part and an oblique part of a character in a graphic pattern. (Oikawa, ¶¶ 0028-0029). Therefore, Claims 1, 11, 18, and 28 are also patentable for at least these reasons.

Dependent Claims 9, 17, 26, and 36 recite that the predetermined pattern of pixel values and its corresponding pcode grid applies to a first color and a second predetermined pattern of pixel values and its corresponding pcode grid applies to a second color. The Office Action asserts that Claim 9 is disclosed by Oikawa, specifically, paragraphs 16-18. The Office Action also asserts that Claims 17, 26, and 36 recite similar limitations as Claim 9, and rejects them on the same basis. The Oikawa-Yamagishi combination, even if made, does not teach these features. Instead, as discussed previously, the cited portion of Oikawa discloses applying a cruciform memory pattern to a graphic pattern, and then comparing the memory pattern conforming to part of the graphic pattern to the memory pattern after it is moved one pixel over on part of the graphic pattern. (Oikawa, ¶¶ 0016-0018). Oikawa does not teach or suggest that a predetermined pattern of pixel values and its corresponding pcode grid applies to a first color and a second predetermined pattern of pixel values and its corresponding pcode grid applies to a second color, as recited in Claims 9, 17, 26, and 36. Therefore, Claims 9, 17, 26, and 36 are patentable for at least these reasons. Also, dependent Claims 2-10, 12-17, 19-27, and 29-37 are patentable at least because they depend from their respective allowable independent base claims.

## IV. Summary

It is respectfully asserted that all of the pending claims are patentable over the cited references, and allowance of the pending claims is earnestly solicited. If the Examiner believes that a further telephone interview would be helpful in resolving any outstanding issues, the Examiner is respectfully invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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